

Title (en)
SYSTEM AND METHOD FOR ABATEMENT OF FOOD COOKING FUMES

Title (de)
VERFAHREN UND VORRICHTUNG ZUR BESEITIGUNG VON KÜCHENDÜNSTEN

Title (fr)
SYSTEME ET PROCEDE POUR REDUIRE LES VAPEURS DE CUISSON D'ALIMENTS

Publication
EP 0779963 B1 20011114 (EN)

Application
EP 95917732 A 19950426

Priority
• US 9505258 W 19950426
• US 27170994 A 19940707

Abstract (en)
[origin: WO9601969A1] A method for treating cooking fumes to oxidize oxidizable particulate and gaseous components thereof includes contacting the fumes with a catalytic material containing ceria and alumina each having a BET surface of at least about 10 m²/g, for example, ceria and activated alumina in a weight ratio of from about 1.5:1 and 1:1.5 and a BET surface area of from about 25 m²/g to 200 m²/g. Optionally, a catalytic metal component such as platinum or palladium may be included in the catalytic material. The foodstuffs cooking fumes are contacted with the catalyst composition (22 or 40) at a temperature of 200 DEG C to 600 DEG C to promote the oxidation of both particulate (atomized) animal and/or vegetable oils and fats and oxidizable gas phase components of the fumes. Optionally, a separate, supplemental gas phase oxidation catalyst (42) may be used in conjunction with and downstream of the above-described catalyst (40) to provide a two-catalyst system for treating cooking fumes.

IPC 1-7
F24C 15/20; B01D 53/86; B01J 23/10

IPC 8 full level
B01D 53/86 (2006.01); **B01D 53/94** (2006.01); **B01J 23/10** (2006.01); **B01J 23/40** (2006.01); **B01J 23/63** (2006.01); **B01J 35/10** (2006.01); **B01J 37/02** (2006.01); **F24C 15/20** (2006.01); **B01J 29/72** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP US)
B01D 53/864 (2013.01 - EP US); **B01D 53/868** (2013.01 - EP US); **B01D 53/944** (2013.01 - EP US); **B01D 53/9481** (2013.01 - EP US); **B01J 23/10** (2013.01 - EP US); **B01J 23/63** (2013.01 - EP US); **B01J 35/60** (2024.01 - EP US); **B01J 37/0215** (2013.01 - EP US); **B01J 37/0244** (2013.01 - EP US); **F24C 15/205** (2013.01 - EP US); **B01J 29/7215** (2013.01 - EP US); **B01J 35/613** (2024.01 - EP US); **B01J 35/615** (2024.01 - EP US); **B01J 35/638** (2024.01 - EP US); **B01J 35/647** (2024.01 - EP US); **F02B 3/06** (2013.01 - EP US)

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9601969 A1 19960125; AT E208883 T1 20011115; AU 2368095 A 19960209; DE 69523933 D1 20011220; DE 69523933 T2 20020404; EP 0779963 A1 19970625; EP 0779963 B1 20011114; US 5580535 A 19961203; US 5756053 A 19980526

DOCDB simple family (application)
US 9505258 W 19950426; AT 95917732 T 19950426; AU 2368095 A 19950426; DE 69523933 T 19950426; EP 95917732 A 19950426; US 27170994 A 19940707; US 64618096 A 19960507